

TIMES AND TRAILS

People, Projects and Priorities at Environment and Conservation

Special Edition

August 2005

2005 Governor's Economic and Community Development Conference

Conference Attendees:

Paul Sloan and I appreciate the opportunity to participate in the 2005 Governor's Economic and Community Development Conference. Tennessee is blessed with a dynamic economy, growing population and abundant natural resources. We are a Top 10 state in many important categories, and the employees at Environment and Conservation are proud of the role they play in supporting our state's outstanding quality of life.

While our department is responsible for a wide range of activities dealing with environmental protection, natural resource conservation and community enhancement, we wanted to highlight some of our programs for you. This special edition of our department's Times and Trails newsletter shares **TDEC's Top 10 Ways We Help Local Government and Business in Tennessee While Protecting Environmental Health:**



Commissioner Jim Fyke

- 1) Expanding Local Recreation Assets and Opportunities
 - ♦ **Recreation Education Services (RES)**
- 2) Investing in Local Communities' Infrastructure
 - ♦ **State Revolving Fund for Clean Water and Drinking Water**
- 3) Promoting Environmental Partnerships through TP3
 - ♦ **Tennessee Pollution Prevention Partnership (TP3)**
- 4) Serving Tennessee's Small Businesses through the SBEAP
 - ♦ **Small Business Environmental Assistance Program (SBEAP)**
- 5) Identifying and Analyzing Needed Cleanup at Contaminated Sites
 - ♦ **Remediation**
- 6) Helping Local Governments Meet Waste Reduction Goals
 - ♦ **Solid Waste Assistance**
- 7) Providing a Unique Training Advantage for Water System Operators
 - ♦ **Fleming Training Center (FTC) in Murfreesboro**
- 8) Enabling the Proper Disposal of Difficult Wastes
 - ♦ **Mobile Household Hazardous Waste (HHW) collection service**
- 9) Keeping Automotive Fluids Out of Tennessee's Waterways
 - ♦ **Used Oil Collection program**
- 10) Protecting our Indoor Air from Radon Gas
 - ♦ **Radon Program**

I would also like to thank the department's partners in local government and industry who make these programs work for our communities. Tennessee is fortunate to have so many businesses demonstrating the kind of environmental leadership that will ensure the kind of cleaner, healthier Tennessee we all want now and in the future. Our department appreciates those that are modeling the way for others. As more Tennesseans get involved and make personal or corporate commitments to positive environmental changes, our air, land and water will realize the benefits.

A handwritten signature in black ink that reads "Jim".

Expanding Local Recreation Assets and Opportunities

The department's **Recreation Education Services (RES)** group is responsible for a wide range of grant activities that enable Tennessee communities to develop and provide top quality parks and recreation facilities. Two very popular grants handled by RES are the Local Parks and Recreation Fund (LPRF) and the Land and Water Conservation Fund (LWCF). RES also administers the Recreation Trails Program (RTP) grant series to provide specific dollars for greenway and trail

74 LPRF and RTP grants totaling more than \$8 million for specific recreation and trails projects were awarded in 2004 to 66 different local governments in Tennessee. These grants ranged in amounts up to \$500,000, with 15 recipients awarded grants of \$200,000 or more.

related projects. Whether it's state or federal grants, local governments and recreation providers can count on the RES team to help them throughout the grant process – from application through completion of the project.

The Tennessee Recreation Initiative Program is another grant program managed by the RES group that assists smaller or rural communities for the purpose of creating a fulltime parks and recreation department where none previously existed by hiring a professional parks and recreation director.

The RES group also has an educational arm that directly assists local recreation providers with current information, planning guidance and operational consultation. Staff prepares reports, assessments, technical bulletins and guidelines specifically for the communities they are working with. The technical assistance they provide is often crucial for local governments to meet the federal requirements required for eligibility to receive federal grant dollars.

For more information on the department's Recreation Education Services, please contact Mark Tummons at (615) 532-0538 or visit www.tdec.net/recreation.



The City of Martin received a \$85,000 Local Parks and Recreation Grant. (L-R) State Senator Roy Herron, Governor Bredesen, Dennis Suiter, City of Martin, Kim Kirby, City of Martin and Environment and Conservation's Jim Fyke.

Investing in Local Communities' Infrastructure

The department's **State Revolving Fund for Clean Water (CWSRF)** and **Drinking Water (DWSRF)** offers low interest rates and flexible terms to cities, counties, utility districts, water and wastewater authorities, and communities of all sizes for the construction of water and wastewater facilities. These low-interest SRF Loans provide the resources for communities to upgrade infrastructure for increased demand, to incorporate modern, safer technologies, to reduce energy costs and to stay in compliance with rules and regulations.

State Revolving Fund projects cost approximately 21% less than projects funded at the market rate. The interest rates are based on an Ability-to-Pay Index that considers a community's per-capita income, taxable sales, and taxable property values. Some loans are issued at zero percent, and the amount of money borrowed can be repaid over a term of 20 years. Overall, Tennessee's interest rates for SRF Loans have averaged 2.2% compared to average market rates of 4.8%.

SRF funds can be awarded for planning, design and construction loans to aid local governments in providing safe and affordable drinking water and wastewater treatment and disposal. SRF loans can fund



The filter room at the Roy S. Oakes Water Treatment Plant in Morristown, Tennessee.

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100 percent of the project's costs or these dollars can be combined in partnership with local governments and other federal and state agencies, e.g. Rural Utility Services or Economic and Community Development block grants, to provide the best mix of water quality financing source(s) for their communities.

With SRF loans, communities can provide lower-cost water and sewer infrastructure to attract business and industry while at the same time protecting the health of their citizens and the environment. Providing safe drinking water and clean streams in Tennessee increases a community's appeal to current and future citizens while making the community attractive to potential businesses, employers, and residents.

For more information about Tennessee's Clean Water Drinking Water State Revolving Fund Loan Program, contact Jim Poff at (615) 532-0445 or visit www.tdec.net/srf/.

Drinking Water State Revolving Fund Loans are available for new construction, upgrades and the expansion of:

- ◆ water treatment plants
- ◆ pump stations
- ◆ transmission and distribution lines
- ◆ water sources
- ◆ water storage facilities
- ◆ the creation of new systems

Clean Water State Revolving Fund Loans are available for new construction, upgrades, and the expansion of:

- ◆ wastewater treatment plants and conveyance, storage, recycling, or reclamation facilities
- ◆ the construction of new sewer lines
- ◆ the rehabilitation/replacement/correction of existing sewer lines, pump stations, manholes, and combined sewer overflows
- ◆ the abatement of non-point source water pollution projects

Since its inception in 1987, Tennessee's Clean Water State Revolving Fund Loan Program has awarded over \$703,000,000 in low-interest loans. Since its inception in 1996, Tennessee's Drinking Water State Revolving Fund Loan Program has awarded over \$74,000,000 in low-interest loans. Both programs combined award approximately \$90,000,000 annually to Tennessee's local governments.

The State Revolving Fund Program also provides these free services to benefit local governments:

- ◆ User Rate Studies to match revenues with future needs
- ◆ Capacity Development Reviews to assess financial, technical, and managerial capabilities
- ◆ Providing information to communities about alternate sources of financing by distributing publications such as "Finding Money"
- ◆ Helping local governments establish interim project financing
- ◆ Training, educating, and assisting consultants and governmental officials with the various phases of the SRF project planning, design, and construction
- ◆ Facilitating training classes for elected officials such as Water System Security and the Elected Officials Academy

Promoting Environmental Partnership through TP3

The department helps communities protect our shared environment through the **Tennessee Pollution Prevention Partnership (TP3)**. This network of Tennessee households, schools, government agencies, organizations, businesses and industries demonstrates that pollution prevention protects the environment, saves money and improves communities. TP3 sponsors coordinated sharing, learning and recognition for results oriented environmental achievements at the community level.



Tennessee Pollution Prevention Partnership members are setting positive environmental examples in their communities all across Tennessee by:

- ◆ reducing pollution and the waste stream created by their operations,
- ◆ protecting special lands in their communities, and
- ◆ enhancing outreach efforts of organizations like Keep Tennessee Beautiful chapters.

For more information on the Tennessee Pollution Prevention Partnership or to become a member, please visit www.tdec.net/ea/tp3, e-mail at pollution.prevention@state.tn.us or call toll-free at (800) 734-3619.

TP3 Performer highlights include:

General Motors-Saturn and the University of Tennessee's Energy, Environment and Resources Center (EERC) have collaborated in the management of its 2500 acre campus to integrate biodiversity, water quality improvement, and natural aesthetics into day-to-day plant management. Saturn has an active partnership with organizations like EarthForce, the Tennessee Scenic Rivers Association and the Tennessee Nature Conservancy specifically focused on the improvements to the local Duck River.

DENSO Maryville and Athens facilities have partnered with local school systems in Blount and McMinn Counties on community projects from recycling programs to household hazardous waste collection events to the start of a *Corporate Lands for Learning* program at the wildlife habitat area.

Bridgestone Americas-Warren County has entered into an environmental partnership with the Tennessee American Chestnut Foundation (TACF) to assist in growing American Chestnut tree hybrids with the goal of an American Chestnut with blight resistance. Hundreds of chestnut trees have been planted with more planned in the future. Students from Warren County, UT-Chattanooga and plant employees conduct the tree plantings.



Employees from TP3 member Bekaert Corporation hit the street in a roadside cleanup project outside of Dyersburg.



Commissioner Fyke presents TP3 Green Flag to Tennessee Koyo Steering Systems in Vonore (Monroe County).



Portion Pac receives TP3 Partner recognition at recent event.

Serving Tennessee's Small Businesses through the SBEAP

The department's **Small Business Environmental Assistance Program (SBEAP)** helps small business owners navigate through the environmental regulatory maze. Sometimes it is difficult for small businesses to determine what environmental regulations impact them and to know the steps needed to get into compliance. Therefore, the SBEAP was set up to:

- ◆ provide free confidential compliance assistance
- ◆ conduct regulatory compliance workshops
- ◆ develop easy to understand compliance assistance materials in the forms of fact sheets, manuals, brochures and even teleconferences
- ◆ conduct onsite compliance reviews
- ◆ work with small business organizations and associations
- ◆ notify impacted businesses of new environmental regulations
- ◆ assist with permitting or other compliance needs
- ◆ make referrals to consultants and other resources as needed



Oakwood Cleaners demonstrates environmentally friendly dry cleaning system to Sharon Goodwin Walker, SBEAP.

Each year the program assists more than 4,000 businesses with their environmental compliance needs. For more information on the Small Business Environmental Assistance Program, please call Linda Sadler at (615) 532-0779 or toll-free (800) 734-3619, email BGSBEAP@state.tn.us or visit www.tdec.net/dca/sbeap

Identifying and Analyzing Needed Cleanup at Contaminated Sites

The department's **Remediation** and long-term cleanup programs find contaminated properties, identify their potential threat to public and environmental health then work to resolve those threats. Communities from Kingsport to Cookeville to Collierville are seeing formerly contaminated properties come back into safe use through the use of brownfield cleanup agreements.

For more information on remediation and long-term cleanup in Tennessee contact Jim Haynes at (615) 532-0227 or visit www.tdec.net/dsf.

Helping Chattanooga Create a Megasite

Chattanooga's Volunteer Army Ammunition Plant (VAAP) is now being cleaned up and has already transferred enough clean property to qualify as a TVA certified megasite capable of attracting major manufacturing enterprises such as automobile production.

Creating a Safer Community in College Grove

In Williamson County's College Grove, the department found citizens were at a health risk because waste hauled from a lead recycling operation was used for fill at local private residences. Elevated lead levels were detected at 96 different properties. At the department's request, EPA conducted removal actions at each of these properties, reducing lead to acceptable levels. The lives of more than 100 families were improved during a total project cost was more than \$7 million dollars.

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The Basin Comes Back; Tourism Thrives in Southeast Tennessee

The Ocoee River is being restored by cleaning up mine wastes from old abandoned copper mines on thousands of acres at Copper Basin in Polk County. Two separate treatment plants are now in operation treating acid mine drainage. These two treatment facilities remove more than 8,900 pounds of metals a day and are contributing to a much healthier Polk County and Ocoee River tourist trade.



Long-term cleanup continues at Copper Basin.

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Helping Local Governments Meet Waste Reduction Goals

The department's **Solid Waste Assistance** program helps local governments plan and execute comprehensive, integrated programs for solid waste management. Specific emphasis is placed on reducing the amount of solid waste requiring collection, treatment, incineration or disposal. The program encourages source reduction, reuse, composting and recycling through grants, incentives, rebates and education.

These informational and financial tools allow local governments to purchase key pieces of recycling equipment, recycle waste tires plus receive rebates for a variety of recycling initiatives. Counties are able to recycle more than 4,000,000 tires annually because of assistance from waste tire grants.

For more information on Solid Waste Assistance, please contact Joyce Dunlap at (615) 532-0075 or visit www.tdec.net/swm.

Key partners for Solid Waste Assistance include the University of Tennessee's Center for Industrial Services (UT-CIS) and County Technical Assistance Service (UT-CTAS), Recycling Marketing Cooperative of Tennessee (RMCT) plus Tennessee's 9 Development Districts. These partnerships allow expanded technical assistance to local governments, business and industry in establishing and operating recycling and source reduction programs.

Partnership results:

- ◆ Creating Web based waste reduction information clearinghouse and materials exchange
- ◆ Marketing difficult recyclable materials
- ◆ Combining loads from small recycling programs to minimize transportation costs while maximizing market price
- ◆ Producing electronic and print educational materials for groups ranging from home builders to landfill operators
- ◆ Promoting land application of a variety of wood waste products to improve soil quality thereby improving crop productivity



Recycled plastic bundles awaiting pick-up.



Paper, aluminum and plastic are sorted at central recycling facility.

Providing a Unique Training Advantage for Water System Operators

Tennessee continues to be recognized by EPA as a leader for the quality of our public drinking water systems. In 2004, more than 98% of Tennessee citizens receiving water from community water systems were served by systems that met all of the federal drinking water standards. One of the key contributors to Tennessee's success is the **Fleming Training Center (FTC)** in Murfreesboro and its accessibility to the thousands of water and wastewater system operators who utilize its ongoing training and services.

The first of its kind, Fleming stands today as one of only a few state-operated training facilities for the water industry. The Center has 3 primary functions supporting water services in Tennessee:

- (1) Serves as the state's environmental training facility.
- (2) Provides the staff, records and administration for the Water and Wastewater Operators certification program.
- (3) Offers technical assistance to treatment operators and plants across the state.

Fleming offers cutting-edge technology and advanced classes in a variety of water areas to assist certified operators in completing their continuing education requirements for operator certification renewal. Using the two on-site laboratories, operators are taught how to sample water and wastewater and properly run the lab tests that determine its quality. In the demonstration area students learn to operate water and sewage pumps, chlorinators, fluoride equipment, back-flow prevention devices, fire hydrants, and water meters.

FTC instructors provide technical assistance to any operator or system in the state experiencing quality control problems or wishing to run its processes more efficiently and effectively. The staff assists operators in solving compliance problems, aids in resolving customer complaints while helping to reduce costs to the facility. System operators have confidence in the staff's ability as problem solvers and feel comfortable contacting them when they need assistance.

FTC provides a valuable service for the operators of water and wastewater systems by providing them with specialized training and assistance so they have the knowledge necessary to safely and efficiently run the treatment plants throughout the state. However, the most important beneficiaries of the training, certification, and technical assistance offered by Fleming are Tennessee's communities. Our state's lakes, streams and rivers are better today because of well-trained operators and the delivery or discharge operations of their systems.

For more information on Fleming Training Center, please call Brent Ogles at (615) 898-8090 or visit www.tdec.net/dca/fleming.



System operators work on skills at Fleming's cross connection stations.

FTC staff serve as the administrative support branch of the Water and Wastewater Operator Certification Board. The Board and staff oversee the renewal and continuing education processes for approximately 5,000 certificates, and 800 applications for examination annually.

A joint effort of FTC and the University of Tennessee Center for Industrial Services offers a slate of utility-oriented safety classes is offered to meet the mandates of several federal laws. For the past three years, FTC has partnered with the University of Tennessee Municipal Technical Advisory Service to provide training and continuing education designed specifically for small water system operators such as those working with mobile home parks and campgrounds.

Enabling the Proper Disposal of Difficult Wastes



The department's mobile **Household Hazardous Waste (HHW)** collection service travels to nearly every Tennessee county giving residents an opportunity to rid their homes of unwanted chemicals. Storing old chemicals around the home can lead to accidental fires and poisonings. Putting chemicals in the trash can injure sanitation workers or damage the environment. This program fills the gap to provide a safe and environmentally friendly outlet for disposal.

Typical items that the program accepts include mercury thermostats and thermometers, batteries, flammable liquids, pesticides, pool chemicals, and automotive fluids. To meet the needs of people across the state, the service began accepting electronics and fluorescent tubes. The service is used by More than 21,000 households annually, and more than 1.6 million pounds of household hazardous waste is properly disposed of in Tennessee through this service.

Recently the program was expanded to include the School Chemical Cleanout Campaign. This project provides funding and technical assistance for public and private schools to clear the laboratories of outdated and unwanted chemicals.

For more information on the HHW collection service contact the Division of Solid Waste Management at (615) 532-9271 or visit www.tdec.net/swm/hhw.

Keeping Automotive Fluids Out of Tennessee's Waterways

The department's **Used Oil Collection** program provides local governments and private business with grants to establish collection facilities where "do-it-yourselfers" can properly dispose of their used oil. This program has grown to more than 900 collection sites in Tennessee, and the Used Oil hot line is able to direct callers to the facility nearest them to dispose of used oil.

The program places particular emphasis on educating the general public regarding proper handling of used oil and convenient collection sites. Over the past year, the department's Used Oil group has partnered with Tennessee minor league baseball, Middle Tennessee State University's WaterWorks! program and other venues to promote greater citizen awareness about proper automotive fluid handling techniques through radio, print and television advertising.

For more information on the Used Oil program contact Paula Smith at (615) 532-9265, call the Used Oil hotline at (800) 287-9013 or visit www.tdec.net/swm/oil.



The Used Oil program was invited to present results of partnership with Tennessee minor league baseball at the North American Hazardous Materials Management Association annual meeting in September.

Protecting our Indoor Air from Radon Gas

The department's **Radon Program** has been assisting Tennessee homeowners and other building owners in assessing indoor radon levels since 1985. Once radon was determined to be a real problem in the state, the department worked closely with the U.S. Environmental Protection Agency, research organizations and contractors to study building dynamics and design reliable mitigation systems.

Radon mitigation systems installed in Tennessee homes during the early days of the program were generally successful in reducing indoor levels. Special research and techniques learned during the mid 1990's as the department addressed occasional high radon levels in homes located on karst geological features led to the development of radon mitigation systems which would function effectively in karst areas. Now building owners in other parts of the country occupying land with similar geological features are able to benefit from efforts expended in Tennessee. The approach to addressing radon in karst areas developed in Tennessee was the beginning of a model for the country.

The department continues to increase the awareness of citizens to the health implications associated with the exposure to radon and promote testing and mitigation to owners of homes, businesses, schools and other buildings across the state.

For more information on radon call the Tennessee Radon Hotline at (800) 232-1139 or visit www.tdec.net/apc/radon.

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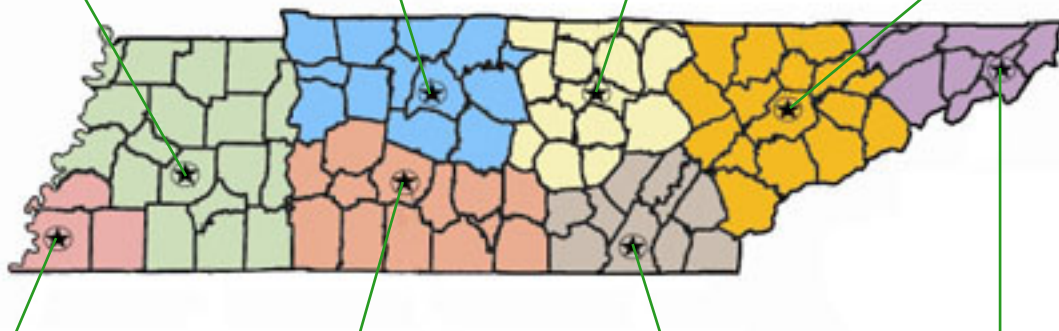
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Department Shares Variety of Helpful Information at 2005 Governor's ECD Conference



Cammie Davenport Woodle, TDOT Civil Rights Office and Commissioner Jim Fyke pause for a photo in front of the Environment and Conservation booth on the Expo Floor at the ECD Conference.



Wilton Burnett, ECD and State Air Pollution Control Board member, Jan Compton, Johnson City Field Office, and Deputy Commissioner Paul Sloan share a moment after Paul's "TDEC's Top 10" presentation.



Andy Shivas, Remediation, (center) shares information on Tennessee's voluntary cleanup and oversight program (VOAP) at the Governor's ECD conference.

Environment and Conservation staff find a home in front of the department's booth at the Governor's ECD Conference (L-R): Brenda Apple, Nashville Field Office, Bill Avant, State Parks, Curtis Hopper, Environmental Assistance, Veronica Greear, State Parks, Don Merony, Environmental Assistance, Lori Munkeboe, Environmental Assistance, Deputy Commissioner Paul Sloan, Steve Ward, State Parks, Mike Robertson, State Parks, Stuart Carroll, State Parks.

